

Name_____ Date_____

Introduction to Bridges

What type of engineers design bridges? _____

3 Things that Bridges are designed to Span are:

1. _____

2. _____

3. _____

The type of bridge constructed depends on:

1. _____

2. _____

3. _____

What materials were first used to build bridges?

_____ were the first great bridge builders. Some still standing today!!

_____ first used in 1700s

_____ in the mid 1800s

_____ in the late 1800s

What materials do we use to build bridges today?

There are 4 main forces that act on bridges (write down the forces and their definition):

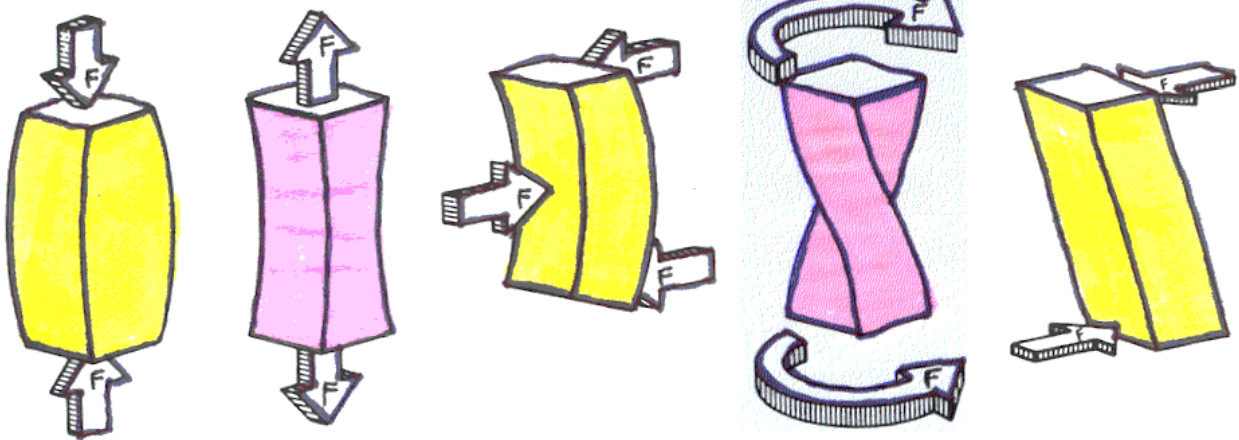
1. _____

2. _____

3. _____

4. _____

Label the following images with the correct force:



Bridge Vocabulary

1. Dead Load – _____

2. Environmental Load – _____

3. Live Load – _____

Bridge Type	Definition	Advantages	Disadvantages

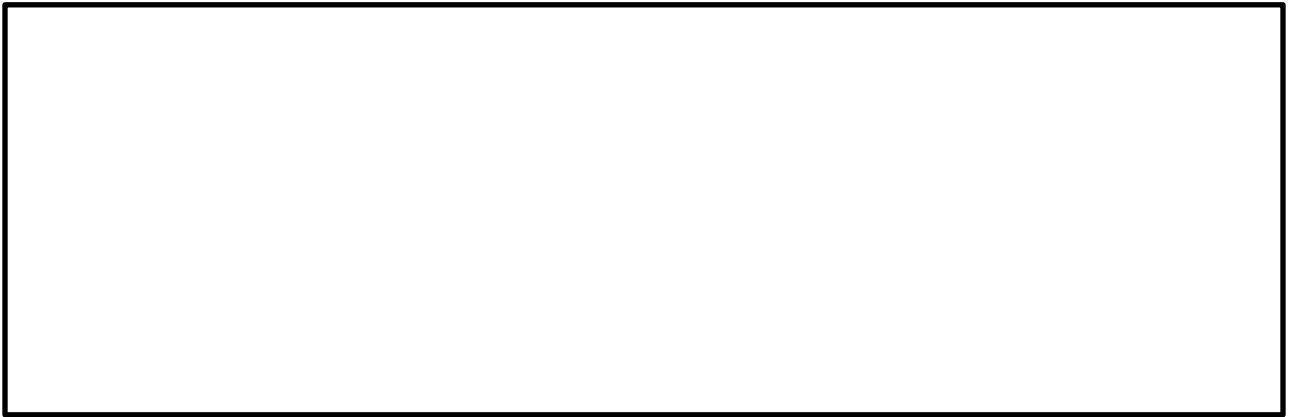
Sketch a Beam Bridge

Sketch an Arch Bridge

Sketch a Suspension Bridge



Sketch a Truss Bridge



Other Bridges

Cable Stayed Bridges: _____

Pontoon Bridges: _____

What are 4 reasons bridges fail?

1. _____
2. _____
3. _____
4. _____